



Peakmoor Sandstone

Technical Data Sheet

Peakmoor Sandstone

Stanton Moor, near Matlock, Derbyshire

Bolehill Quarry, Wingerworth, Derbyshire, S42 6RG

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Grid reference : -- --

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General

The quarry is on Stanton Moor on the eastern outskirts of Stanton-in-Peak, near Matlock in Derbyshire. The quarry was reopened in 1985 but it has been producing building stone since at least 1945. There are good reserves of stone.

Petrography

Peakmoor Sandstone is a Millstone Grit of Carboniferous age. It is a fine- to medium-grained stone, and varies in colour from light brown to pink. Stone is extracted from a 20m high face with average block sizes of 1500mm x 800mm x 800mm.

Expected Durability and Performance

It is important that the results from the individual tests are not viewed in isolation. They should be considered together and compared to the performance of the stone in existing buildings and other uses. Carboniferous Sandstones are traditionally acknowledged as generally being a very durable building and paving stone and have been used extensively in many towns and cities in the UK. Peakmoor Sandstone appears to be a durable stone that is not effected by acid rain or air pollution. Most sandstones have good frost resistance. The compressive strength of the stone is typical of the range for sandstones and is comparable with the stronger UK limestones. It is accepted in Germany for use in rainscreen type cladding at 40mm thick.

Overall, Peakmoor Sandstone should be suitable for use in most aspects of load bearing masonry and cladding.

Test Results – Peakmoor Sandstone

Safety in Use		
Slip Resistance ^(Note 1)	Not determined	Values > 40 are considered safe.
Abrasion Resistance ^(Note 1)	Not determined	Values <23.0 are considered suitable for use in heavily trafficked areas
Strength under load		
1) Compression ^(Note 2)	72.5 MPa	Loaded perpendicular to the bedding plane ambient humidity
2) Bending ^(Note 1)	7.5 MPa	Loaded perpendicular to the bedding plane ambient humidity
	4.8 MPa	Loaded parallel to the bedding plane ambient humidity

Porosity and Water Absorption		
1) Porosity ^(Note 3)	16.46%	
2) Saturation Coefficient ^(Note 3)	0.68	
3) Water Absorption	5.07 % (by wt)	
4) Bulk specific gravity	2210kg/m ³	
Resistance to Frost		
Freeze/Thaw Test ^(Note 1)	Not determined	Note: the stone Passed Test B using DIN 52 104
Resistance to Salt		
Sodium Sulphate Crystallisation Test ^(Note 3)	1.07% Mean wt loss	
Sodium Sulphate Crystallisation Test ^(Note 14) (saturated)	No results available	

Resistance to Acidity		
Acid Immersion Test ^(Note 4)	Pass	All samples passed the test with no splitting or delamination

(Test methods Note 1 = prEN1341, Note 2 = prEN 1342, Note 3 = prEN 1341 /BRE 141, Note 4 = BRE 141, Note 5 = ASTM.

Based on BRE Test results and data supplied by the producer)